Revised Key Design Principles for Direct Assessments of SEL: Lessons Learned from the Second Design Challenge

Background

The field of social and emotional learning, or SEL, is in a growth phase. An increasing number of states have adopted standards describing the social and emotional (SE) competencies children should know about and be able to demonstrate. A number of effective SEL programs are widely used. Also, a growing evidence base consistently shows that SE competencies are both teachable and important predictors of success in school and life.

As SEL standards and programs gain traction, it is important that educators be able to assess student SE competency development. Recognizing that SE competence assessment is not as far along as other areas of the field, the Funders Collaborative for Innovative Measurement (FCIM) has formed The Practical Social-Emotional Competence Assessment Work Group (AWG) to engage in several interrelated projects designed to accelerate progress in SE competence assessment.

One of the AWG projects is an annual Social and Emotional Competence Assessment Design Challenge. Through a national competition, the Design Challenge highlights new and emerging ideas related to direct assessments of student SE competencies. These assessments differ from the more typical current generation of SE competence assessments in which students, educators, and parents respond to surveys. During the first two years of the Design Challenge, we solicited submissions that reflected assessment concepts, designs, prototypes, or fully developed assessments. The ultimate purpose was to shine a light on innovative and technically sound direct assessments of SE competencies that are also practical and feasible to use in schools, and in so doing to stimulate further development and adoption of these assessments.
First Design Challenge

Our first call for submissions, released in March 2017, elicited 20 submissions of innovative direct assessments of SE competencies, described in the first Design Challenge brief. Our first pool of submissions yielded many important lessons about the state of the field. Specifically, we concluded that currently available SE competence assessments need to be more relevant, practical, and useful for guiding practice. We also observed that, although the competition was open to anyone, all the submissions were from test developers and none from practicing educators.

Second Design Challenge: Educators’ Priorities

For the second Design Challenge, we wanted to increase practitioner input so we could spotlight direct assessments that are responsive to clearly expressed practitioner needs. To that end, we first asked practitioners to submit brief descriptions of the kinds of assessments that would most benefit them in their work with students, and how those assessments would help them. In response, we received over 60 submissions. We selected the 10 best submissions that applied to a universal group of students within PreK to 12th grade and provided a clear and actionable description of need that could be addressed through a direct assessment of SE competences. Appendix A details the winning submissions from educators. The winning submissions prioritized the following:

- College readiness of high school juniors and seniors, including interpersonal competencies and problem-solving in new or unexpected situations.
- The impact of SEL interventions such as morning meetings for elementary school students.
- Parent and child understanding of SEL strategies to manage emotions, recognize mental health crisis warning signs, and practice empathy daily.
- SE competencies that employers seek when hiring students from career and technical programs.
- The impact of a character and leadership development program on academic performance, high school and college graduation, and success in life.
- Student SE competence before and after the delivery of an evidence-based curriculum, which could help inform instruction and program decisions, ensure fidelity of instruction, and help with the generalization of SE competences.
- The impact of an afterschool social skills group on students’ self-regulation, confidence, and social perspective-taking, which could help inform what is taught and evaluate program effectiveness.
- Student motivation and growth mindset to inform teacher instructional practices.
- The impact of cooperative learning strategies on students’ ability to collaborate.
- The impact of an entrepreneurship and experiential learning program on students’ college- and career-readiness skills.
Second Design Challenge: Winning Responses

In the second phase of this year’s Design Challenge, we called for submissions of direct assessments specifically designed to address the needs articulated by the winning practitioner submissions. We asked that submitters identify one of the needs to respond to and describe their assessment and how it would address the stated need. We emphasized that submissions could be designs, prototypes, or fully developed assessments. In response, we received 11 submissions—six from practitioners, two from researchers, two from test developers, and one from a consultant. Six submissions were in the design phase, four reflected working prototypes, and one was a fully developed assessment.

Judges selected five submissions as winners. Appendix B provides information on the winning submissions. In brief, they included:

- A design for a brief assessment of SE competencies among elementary-aged students using a game-like computer platform in which students respond to hypothetical vignettes—for example, a child wants to join a group on the playground.
- A design for a text-based decision game for high school in which students walk through scenarios and earn points for actions they take in response to specific situations. For example, a ninth-grade student will start the game off thinking through the type of graduation pathway he/she wants to pursue and what types of classes he/she needs to take during the current and future years.
- A fully developed web-based assessment of social information processing for the elementary and middle school grades that uses an interactive and immersive format in which students customize and adopt the role of an avatar who experiences challenging social situations such as initiating a friendship or bullying.
- A rubric design for evaluating the extent to which high school students demonstrate critical SE competencies during classroom time—for example, collaboration skills during science class.
- A prototype problem-solving assessment for high school students that asks students to solve a challenging problem related to declining student enrollment at their school.

Analysis of Emerging Themes

Several themes emerged from this year’s Design Challenge submissions:

- Submissions were from a mixture of practitioners and researchers, suggesting that the intention to increase practitioner voice in the design challenge was successful.
- The number of submissions was lower this year, suggesting both that (1) we may have identified the most prominent makers of direct assessments and (2) fewer direct assessments respond to specific practitioner needs.
Establishing Practical Social-Emotional Competence Assessment Work Group  

• Three out of the five winning submissions were in the design phase. This suggests that these submissions reflect the aspirations of test developers as they conceptualize how to address the unmet assessment needs of practitioners.

• All winning submissions this year relied on children’s responses to challenging hypotheticals, simulated situations, or demonstrations of competencies in natural contexts. This suggests that good direct assessments will involve sampling behavior that is as close to “real world” behavior as possible.

• Although direct assessments provided an appropriate means of addressing many of the identified practitioner needs, some might also have been effectively addressed by non-direct assessment strategies such as teacher report or observation.

We believe the Second Design Challenge successfully sampled assessment designs that aspire to address assessment needs identified by practitioners. In so doing, it adds to the lessons learned from the First Design Challenge and illustrates vividly the state of SE competence assessment development. On the one hand, practitioner needs are clear and creative minds can envision assessments designed to meet those needs. On the other hand, it also suggests that the number of simulation-based, actionable, direct assessments ready for deployment is limited.

Updated Design Principles Based on the Second Annual Design Challenge

After the first Design Challenge, we established principles to guide future SE competence direct assessment development. Among those principles were:

• Usability and feasibility in authentic educational settings.
• Clarity about the purpose for which the assessment is designed.
• Developmental and cultural appropriateness.
• Data reports that are easily understood and address the specific information needs of educators.
• Feasibly and easily used by entire districts with minimal intrusion on instructional time.
• Technical soundness.

Those design principles remain relevant to the ongoing development of SE competence direct assessments.

First, assessments that are most responsive to practitioner needs appear to be those that provide opportunities for students to demonstrate their SE competencies in response to performance challenges encountered in the real world. This suggests that simulations or vignettes may more closely align to practitioner needs than tasks that may have technical merit but are decontextualized or do not have clear and obvious application in real-world interactions.
Second, involving practitioners in the process of assessment development will strengthen the products of these efforts. We learned directly about the benefits of practitioner involvement from our two-stage Design Challenge, in which we solicited practitioner views of the greatest assessment needs followed by a call for submissions of direct assessment designs, prototypes, or fully developed assessments. In our second year, more practitioners submitted designs, and those received had high face validity. It was clear what the assessments were designed to assess, and it was easy to imagine how they would be used to guide practice. This suggests that partnerships between practitioners and test developers that start at the very beginning of assessment development—identifying the assessment need—will yield better assessments than would be possible without practitioner involvement.

Third, direct assessment is not the only strategy that can meet practitioner needs. A careful consideration of the needs described by practitioner submissions suggests that a variety of assessment methods might be useful for addressing their needs. For example, one practitioner expressed a wish for an assessment to evaluate skill generalization across contexts. While direct assessment might be helpful, frequent self-report or “experience sampling” might also be an effective method. Another practitioner wished to measure parent and child understanding of social-emotional skills after instruction. Direct assessment of those skills might be useful, but simple self-report to assess knowledge might also serve that goal. There is a strong need for direct assessment, and therefore it has been the focus of the AWG’s Design Challenge. However, because the varied goals of SE competence assessment may not all be best served with direct assessment, it may be useful to consider the advantages of offering a broad portfolio of assessment options that can be used alone or in combination to provide a clear picture of student SE strengths and needs.

Conclusion and Next Steps

With two Design Challenges completed, the state of the art in existing direct assessments is coming into focus, as is our understanding of the most pressing practitioner needs and aspirational direct assessment designs that address those needs. As the SE competence assessment field continues to blossom, it is important to continue identifying the most pressing applications of SE competence assessments and the best assessments to meet those needs. Several companies have emerged offering SE competence assessment services, suggesting that schools are prioritizing SE competence assessment enough to sustain a small number of assessment providers. SE competence assessments currently offered in the commercial marketplace include self-report questionnaires, teacher rating scales, direct assessments, and peer nomination measures. Each of these approaches has advantages and disadvantages, and all have a place in the educational assessment portfolio. It may therefore be useful for future Design Challenges to focus on soliciting ideas for how different sources of assessment data can be collected and combined to provide a richer picture of student strengths and needs than would be possible with a single source of data.
Among the broader AWG projects, an important theme has emerged: SE competence assessment is only a starting point. Assessment data that no one looks at cannot improve teaching and learning. Between administering an assessment and the benefit to teaching and learning lies a chain of events that cannot be taken for granted. In addition to usable, feasible, technically sound assessments, the field should work to provide guidance about how best to use SEL data—what conversations need to happen, in what format, how frequently, and with which people in school buildings and district offices to increase the odds that SE competence assessment data will constructively inform instruction and help support student growth. Thus, complementing other work of the Assessment Work Group, the Design Challenge may be enlisted to solicit not just direct assessments but systems for promoting the effective use of data that result in the kinds of data review, deep reflection, and decision-making that characterize the best continuous improvement efforts.

The second year of the Design Challenge successfully built on the work of the first year. By incorporating the voices of practitioners into our call for submissions, the competition attracted innovative and practical assessment submissions to meet the most pressing needs of educators. We look forward to our third and final year of the competition, when we hope to integrate lessons learned from the first two years and continue to develop our design principles for practical direct assessments of SE competencies to guide future work in the field.

The AWG is the working group for the Establishing Practical Social-Emotional Competence Assessments of Preschool to High School Students project, which was created to advance progress toward establishing practical SEL assessments that are scientifically sound, feasible to use, and actionable as a key priority for the field. The project’s work group is a multidisciplinary collaborative of leading researchers and practitioners in the fields of PreK-12 education, assessment, social and emotional learning (SEL), and related fields. As part of a three-year effort, members of the work group will work in partnership to make key advancements in student SEL assessment.

The efforts of the AWG are supported by: S. D. Bechtel Foundation, Jr., Einhorn Family Charitable, Ewing Marion Kauffman Foundation, Overdeck Family Foundation, Raikes Foundation, The Spencer Foundation, and Wallace Foundation.

To learn more, please visit http://measuringsel.casel.org/
Appendix A. Winning descriptions of practitioner needs

Lucia Alfaro, Livingston Union School District
I would like to measure how and if parents and their children understand the same SEL strategies to manage emotions, recognize mental health crisis warning signs that necessitate asking for additional support, as well as how to practice empathy daily. Measuring tools could include pre/post tests before and after calibrated SEL parent education is presented and before and after student SEL education is provided schoolwide K-5. Data will be used to target additional education needs within parent and student populations so that SEL could continue in the home in coordination with school SEL education efforts.

Margaret Borelli, Meriden Public Schools
I would like to be able to determine a baseline, teach an evidenced-based curriculum, and measure the effectiveness of the curriculum. In order to meet IEP goals and help students develop their problem solving skills I need to be able to measure current skills and teach a curriculum to develop skills. I work with over 100 students in small groups or individually. I would like to be able to collect concrete data regarding lagging skills and skill improvement following direct instruction and practice of skills. The data collected will drive programming, ensure fidelity of instruction, and help with the generalization of skills learned in small groups or individually.

Randie Chubin, Cheder Lubavitch Hebrew Day School
I would love a way to be able to know when to push a student to try again or to let the child stop working at that time. Many of the students I work with have the belief that they won’t be able to do the assignment put in front of them. My job is to break the assignments down into manageable pieces and explain it in terms the students will understand. The problem is, when they come to me, they already have a “stuck” attitude. If there was a way to measure beyond their words to know if I should use my time with the students to convince them that they can do it or if I should be more of a social worker and ask questions, such as what is the most challenging part of this…. I go with my gut and usually end up doing both, but a tool to measure this would be helpful for guidance, as well as documentation. How often? Each session. How many students? About 20 a day, from 1-6 at a time.

Carolyn Coli, FXW
Background Info: Started new afterschool social skills groups K-3. Want to create screener, pre and post assessment to measure self-regulation (body and emotion), growth mindset/confidence, and social perspective taking. I have 16 students total in four groupings. I want this assessment to inform my curriculum, show admin/parents data that supports my program and highlight the need for this support/resource.

Elizabeth Grant, Boston Green Academy
We would like to be able to prepare our 100+ high school juniors and seniors for college success by measuring their ability to (1) problem solve if new or unexpected situations arise in college; (2) initiate social interactions with professors, fellow students and staff to build support networks in a new environment; and (3) collaboration and teamwork to work with others to find ways to be successful. If we could measure these skills in high school then perhaps we can collaborate with families to help develop or enhance these skills and better prepare students to successfully navigate the transition from high school to college.
Theresa Lewis, Saint Mary’s University
I would like to have a variety of ways K-12 teachers could assess how their students are growing in their abilities to collaborate with their classmates in small groups. I would also like to have some way of assessing how the team approach fosters academic success for all members of the team. The teachers in my program are designing lessons to teach their students how to learn as a social process. They have picked certain aspects of social learning on which to focus their lessons. Their lessons are based on skills necessary to make a team function effectively like communication, self-motivation, responsibility, problem-solving, social awareness, and self-management. They have used self-assessment, reflection, and observation to assess the progress of their groups. They are looking for some more ideas to help them decide if their students are actually using the skills they are teaching them to enhance the learning of content in their small groups.

Jeffrey Lund, Hyde Foundation
At Hyde Foundation we have a small network (5 schools 2,300 students) serving schools in urban low-income communities of color (in USA approximately 12 million students in 20,000 schools). We have an integrated character and leadership development framework with practices and programs and processes. Our mantra is that individuals are born with a unique potential and character defines destiny. We help schools, teachers, students, and parents forge a partnership to help transform student lives. We call it family-based character education. We want to better assess and correlate the impact of student character and leadership development on academic performance, graduation, college graduation and success in life. We would love to expand our data collection across more schools to enrich our findings. Our findings would be made available to participating schools.

Nicole Ramos, BUILD
The BUILD curriculum uses entrepreneurship and experiential learning to drive growth in key skills (Communication, Collaboration, Problem-Solving, Innovation, Grit, Self-Management, and Growth Mindset) that matter for future success in high school, college, career and beyond. Because the skills are central to the theory of change for the curriculum, we seek to understand how students are growing in their skills, and even further, understand at what points during the curriculum they experience most growth. While that information would be helpful to understand whether our program “works“ in the way we believe it to, what we really want to know is whether or how students are transferring the skills that we explicitly aim to teach into other contexts. We imagine this might be done by engaging students in ongoing self-reported behavioral assessment via SMS or an app to understand if/how they are thinking about and activating the skills outside of the classroom – in other classes, in their personal lives, etc. This type of assessment would help us focus on not only the skill development, but also building the right strategies (metacognitive and otherwise) to help students use the skills to foster success more broadly.

Christine Rick, School District of Palm Beach County
As a school administrator, I would like to measure the impact of SEL and student performance. Working with the Wallace Foundation and CASEL, we are implementing Morning Meeting. Although I am excited to continue in the SEL journey with my students and staff, I need assessment to measure the impact.

Laura Robinson, Kent Intermediate School District
I am wondering if there is a group you have unintentionally left out of the SEL discussions, and that is career and technical education students. In our district, we are overlaying PBIS and career and employability (noncognitive) skills demanded by the employers hiring our students (11th and 12th grade) across our campus (four high schools). We need to be able to assess these skills to certificate our students going directly into careers (businesses are demanding this from the school district). We service (at an Intermediate School District level) approximately 3,000 students coming to us from all of our local districts.
Appendix B. Winning descriptions of direct assessment submissions

**First Place**

**Selected Response Assessment of Social Emotional Competence (SRASEC)**
A selected-response assessment of elementary students’ social emotional competence, addressing knowledge via a game-like, computer-based administration platform. The final format will include about 35 items linked to about five vignettes, with content designed to elucidate elementary students’ thinking about issues related to SE competence (e.g. a child wants to join a group on the playground, an older child bullies a younger child on the bus, one child looks at another’s responses on a test). Students will be asked to describe the feelings that characters in the vignette are experiencing, the reasoning for their actions, and how the characters are likely to behave next. Items will be dichotomously scored (i.e., correct or incorrect) and will use formats common to knowledge tests such as multiple choice, true/false, or matching.

Submitted by:
Ryan Kettler PhD, Rutgers, The State University of New Jersey
Kelly A. Feeney-Kettler, PhD, F K & K Consulting
Leah Dembitzer PsyD, Concordia College, New York

**Second Place**

**Text-Based Decision Game**
A text-based decision game for high school students where they walk through scenarios, earn points, and are connected to resources to help them along their pathway. Scenario details will depend on an individual student’s academic and behavioral data. For example, an incoming ninth-grade student (on whom we will have little data) will start the game off thinking through the type of graduation pathway he/she wants to pursue and what types of classes he/she needs to take during the current and future years, whereas a returning eleventh-grade student will start the game off thinking more specifically on how he/she will prioritize submitting college applications considering their frequency of missing homework assignments in the past month. In its initial design, the game will be targeted at addressing the unique set of values at Democracy Prep Public Schools (Discipline, Respect, Enthusiasm, Accountability, Maturity, Bravery, Initiative, and Grit), but will later be able to include other school values.

Submitted by:
Miguel Rivera-Rios, Democracy Prep Public Schools
Sharese Maine, Democracy Prep Public Schools
Alize-Jazel Smith, Democracy Prep Public Schools
Third Place
Virtual Environment for Social Information Processing (VESIP)
A theory-based, web-based assessment for third through seventh-grade students that utilizes an interactive and immersive simulation format to assess children's social information processing skills by measuring a child's ability to effectively reason through five types of challenging social situations: (a) ambiguous, provocation, (b) bullying, (c) compromise, (d) peer entry into a group, and (e) friendship initiation. The overarching goal of VESIP is to fill a gap in available methods to assess social information processing, a key component of social-emotional learning competencies.

Submitted by:
Nicole M. Russo-Ponsaran, Rush NeuroBehavioral Center
Jeremiah Folsom-Kovarik, Soar Technology
Eric Tucker, Soar Technology
Jacob Crossman, Soar Technology

Fourth Place
The Skill Rubric Template (SRT)
A set of rubrics designed to allow for authentic assessment of high school students' social and emotional skills as demonstrated during regular classroom or program activities. The SRT provides a central framework for defining and measuring skills of communication, collaboration, problem solving, innovation, grit, and self-management. Evaluators (teachers, coaches, mentors, etc.) construct a rubric for any given task by first identifying which skills and subskills students should exhibit in the performance of that task. The SRT ensures that anyone assessing a student's skills is (a) using the same definition of the skill, (b) looking for the same indicators, and (c) assigning scores in a similar way so that assessment scores can be meaningfully linked across different contexts.

Submitted by:
Stacie Furia, BUILD
Nicole Ramos, BUILD
Ryan Novack, BUILD
Diane Bezucha, BUILD

Fifth Place
Problem Solving Performance Assessment
This assessment is designed to determine high school students' level of proficiency in problem solving. Students first generate solutions to an open-ended hypothetical scenario where enrollment is declining at the students' school. Next, they examine their solutions for (1) Strengths (2) Weaknesses (3) Opportunities and (4) Threats (SWOT Analysis) and choose the best solution. Students are assessed on a four-point rubric according to the degree to which they consistently apply thorough reason and logic in solving the problem.

Submitted by:
Tara Laughlin, PAIRIN